

WE CLAIM:

1. A computer-readable medium having computer-executable components, comprising:
  - a writer configured to create a writer metadata file, the writer being associated with a plurality of components stored on a volume of a computing system, the writer metadata file including an identifier of the writer and a description of which of the plurality of components are to be included in a backup operation of the volume;
  - a requestor configured to read the writer metadata file to identify the components to be included in the backup operation and to interface with a service configured to create an image of the volume at an instant in time, the requestor being further configured to backup the identified components from the image of the volume to a backup medium.
2. The computer-readable medium of claim 1, wherein the requestor is further configured to create a backup components file describing a set of components that are to be included in a backup operation managed by the requestor, and wherein the requestor is further configured to provide the backup components file to the writer for modification.
3. The computer-readable medium of claim 1, wherein the writer metadata file further comprises a listing of files within the plurality of components that are intended to be excluded from the backup operation of the volume.
4. The computer-readable medium of claim 1, wherein the writer metadata file further comprises an identification of a restore technique to be applied to the backed up components during a restore operation.
5. The computer-readable medium of claim 4, wherein the restore technique comprises restoring the backed up components if those components are not already at a restore location for the components.

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6. The computer-readable medium of claim 4, wherein the restore technique comprises replacing components already at a restore location with the backed up components if those components can be replaced.

7. The computer-readable medium of claim 4, wherein the restore technique comprises stopping a service prior to restoring the backed up components.

8. The computer-readable medium of claim 7, wherein the restore technique further comprises restarting the service after restoring the backed up components.

9. The computer-readable medium of claim 4, wherein the restore technique comprises restoring the backed up components to a location other than the location from which the components were backed up.

10. The computer-readable medium of claim 4, wherein the restore technique comprises causing the backed up components to be restored during a subsequent system reboot.

11. The computer-readable medium of claim 4, wherein the requestor is further configured to perform a restore operation of the backed up components by applying the restore technique to the backed up components during the restore operation.

12. A computer-readable medium having computer-executable instructions, comprising:

- initiating a backup operation;
- causing a writer associated with an application, the application being associated with a plurality of components, each component describing one or more files, to create and make available a metadata file identifying which of the plurality of components are selected for inclusion in the backup operation;
- reading the metadata file to identify the selected components; and
- performing the backup operation on the identified components.

13. The computer-readable medium of claim 12, further comprising:

prior to performing the backup operation, creating a backup components file describing a set of components that are intended to be backed up during the backup operation;

making the backup components file available to the writer for modification to include instructions related to the backup of the selected components; and

wherein performing the backup operation further comprises performing the backup operation on the identified components in accordance with any instructions provided by the writer in the modifications to the backup components file.

14. The computer-readable medium of claim 12, wherein the metadata file further comprises an identification of a file associated with the application and selected for exclusion from the backup operation.

15. The computer-readable medium of claim 14, wherein performing the backup operation includes excluding from the backup operation the file selected for exclusion.

16. The computer-readable medium of claim 12, wherein the metadata file further comprises instructions related to a restore technique to be applied to one or more of the identified components during a restore operation.

17. The computer-readable medium of claim 16, further comprising performing a restore operation of the identified components in accordance with the restore technique identified in the metadata file.

18. The computer-readable medium of claim 12, wherein performing the backup operation comprises causing an image of the selected components to be taken, the image reflected a quiescent state of the selected components at an instant in time.

19. The computer-readable medium of claim 18, wherein the image comprises a snapshot of a volume on which is stored the selected components.

20. A computer-readable medium having stored thereon a data structure, comprising:

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a first data field describing a writer, the writer being associated with an application, the application having an associated plurality of files; and  
a second data field describing a first set of files in the plurality of files for inclusion in a backup operation performed by a common backup application,  
wherein the common backup application is configured to read the data structure and perform the backup operation on the first set of files described in the second data field.

21. The computer-readable medium of claim 20, wherein the data structure further comprises a third data field describing a second set of files in the plurality of files for exclusion from the backup operation and wherein the common backup application is further configured to perform the backup operation by excluding the second set of files.

22. The computer-readable medium of claim 20, wherein the data structure further comprises a fourth data field describing a restore technique to be applied to the first set of files during a restore operation and wherein the common backup application is further configured to apply the restore technique to the first set of files during the restore operation.

23. A computer-readable medium having stored thereon a data structure, comprising an identification of a set of files to be included in a backup operation performed by a common backup application, the data structure being created by the common backup application during one phase of the backup operation, the data structure being made available to a writer for modification, the writer being configured to annotate the data structure with information related to operations to be performed after the backup operation.

24. A computer-implemented method for backing up data stored on a computer-readable medium, the method comprising:

receiving a notification from a backup program that a backup operation is commencing;

in response to the notification, preparing a writer metadata file that describes a group of resources associated with an application, the group of resources being intended for backup;

making the writer metadata file available to the backup program; and

in response to a notification that the backup operation has concluded, performing a post-backup operation.

25. The computer-implemented method of claim 24, further comprising:  
reviewing a backup components file prepared by the backup program, the backup components file describing the backup operation being performed; and  
modifying the backup components file to include additional information associated with the application.

26. The computer-implemented method of claim 25, wherein the additional information comprises an indication to perform a procedure at the conclusion of the backup operation.

27. The computer-implemented method of claim 24, further comprising, prior to performing the backup operation, in response to receiving a notice that an image is being created of the group of resources intended for backup, temporarily ceasing access to the group of resources.

28. The computer-implemented method of claim 27, wherein the image comprises a snapshot of the computer-readable medium.

29. The computer-implemented method of claim 24, wherein the writer metadata file further describes a second group of resources associated with the application, the second group of resources not being intended for backup.

30. A computer-implemented method for backing up data stored on a computer-readable medium, the method comprising:  
initiating a backup operation;  
causing a writer associated with an application, the application being associated with a plurality of components, each component describing one or more files, to create and make available a metadata file identifying which of the plurality of components are selected for inclusion in the backup operation;

reading the metadata file to identify the selected components; and  
performing the backup operation on the identified components.

31. The computer-implemented method of claim 30, further comprising:  
prior to performing the backup operation, creating a backup components file  
describing a set of components that are intended to be backed up during the backup operation;  
making the backup components file available to the writer for modification to  
include instructions related to the backup of the selected components; and  
wherein performing the backup operation further comprises performing the  
backup operation on the identified components in accordance with any instructions provided by  
the writer in the modifications to the backup components file.

32. The computer-implemented method of claim 30, wherein the metadata file further  
comprises an identification of a file associated with the application and selected for exclusion  
from the backup operation.

33. The computer-implemented method of claim 32, wherein performing the backup  
operation includes excluding from the backup operation the file selected for exclusion.

34. The computer-implemented method of claim 30, wherein the metadata file further  
comprises instructions related to a restore technique to be applied to one or more of the identified  
components during a restore operation.

35. The computer-implemented method of claim 34, further comprising performing a  
restore operation of the identified components in accordance with the restore technique identified  
in the metadata file.

36. The computer-implemented method of claim 30, wherein performing the backup  
operation comprises causing an image of the selected components to be taken, the image  
reflected a quiescent state of the selected components at an instant in time.

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37. The computer-implemented method of claim 36, wherein the image comprises a snapshot of a volume on which is stored the selected components.

38. A computer-implemented method for restoring data backed up from a computer-readable medium during a backup operation, the method comprising:

receiving a notification that a restore operation of the data is commencing;  
retrieving information that describes a group of resources that were included in the backup operation;  
restoring the group of resources in accordance with the retrieved information.

39. The computer-implemented method of claim 38, wherein the retrieved information includes a backup components file that describes the data backed up from the computer-readable medium during the backup operation.

40. The computer-implemented method of claim 38, wherein the retrieved information includes a writer metadata file that describes the group of resources.

41. The computer-implemented method of claim 40, wherein the writer metadata file further comprises an identification of a restore technique to be applied to the backed up data during the restore operation.

42. The computer-implemented method of claim 41, wherein the restore technique comprises restoring the backed up data if the data are not already at a restore location for the data.

43. The computer-implemented method of claim 41, wherein the restore technique comprises replacing data already at a restore location with the backed up data if the data already at the restore location can be replaced.

44. The computer-implemented method of claim 41, wherein the restore technique comprises stopping a service prior to restoring the backed up data.

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45. The computer-implemented method of claim 44, wherein the restore technique further comprises restarting the service after restoring the backed up data.

46. The computer-implemented method of claim 41, wherein the restore technique comprises restoring the backed up data to a location other than the location from which the data was backed up.

47. The computer-implemented method of claim 41, wherein the restore technique comprises causing the backed up data to be restored during a subsequent system reboot.

48. A computer-readable medium having a data structure stored thereon, the data structure comprising:  
 a first field identifying an application to be backed up in a backup operation;  
 a second field identifying an object that defines a set of resources associated with the application to be backed up, the set of resources intended to be backed up as a unit.

49. The computer-readable medium of claim 48, wherein the object comprises a component.

50. A computer-implemented method for backing up data stored on a computer-readable medium, the method comprising:  
 performing a backup operation by making a backup copy of resources stored on the computer-readable medium, the resources being associated with an application; and  
 notifying the application of the resources that were successfully backed up during the backup operation.

51. The computer-implemented method of claim 50, wherein notifying the application of the resources includes making a document available to the application, the document including an identification of resources that were successfully backed up during the backup operation.



52. The computer-implemented method of claim 51, wherein the document comprises a backup components file.

53. The computer-implemented method of claim 51, wherein the document is passed to the application at the completion of the backup operation.

54. The computer-implemented method of claim 51, further comprising:  
performing a restore operation of the resources that were successfully backed up during the backup operation; and  
making the document available to the application, thereby enabling the application to perform post-processing on the resources that are restored.

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